

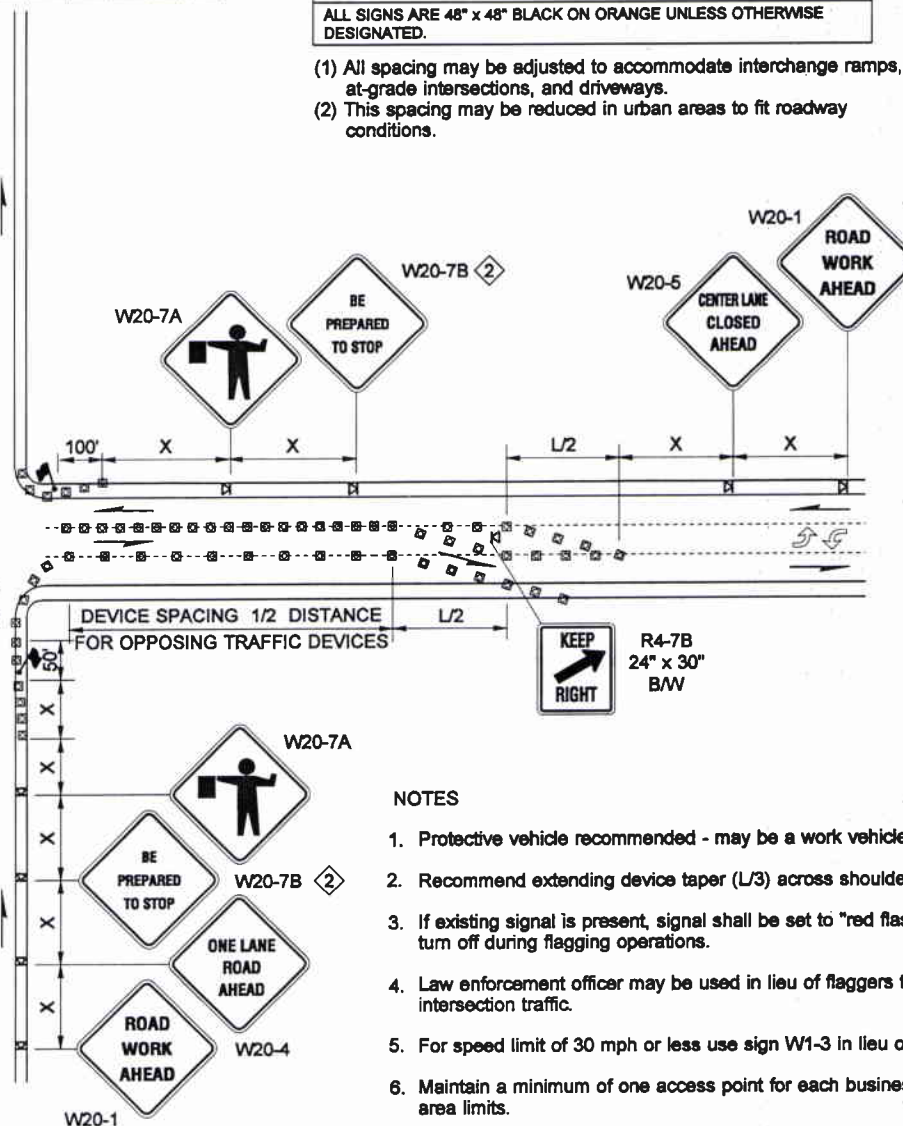
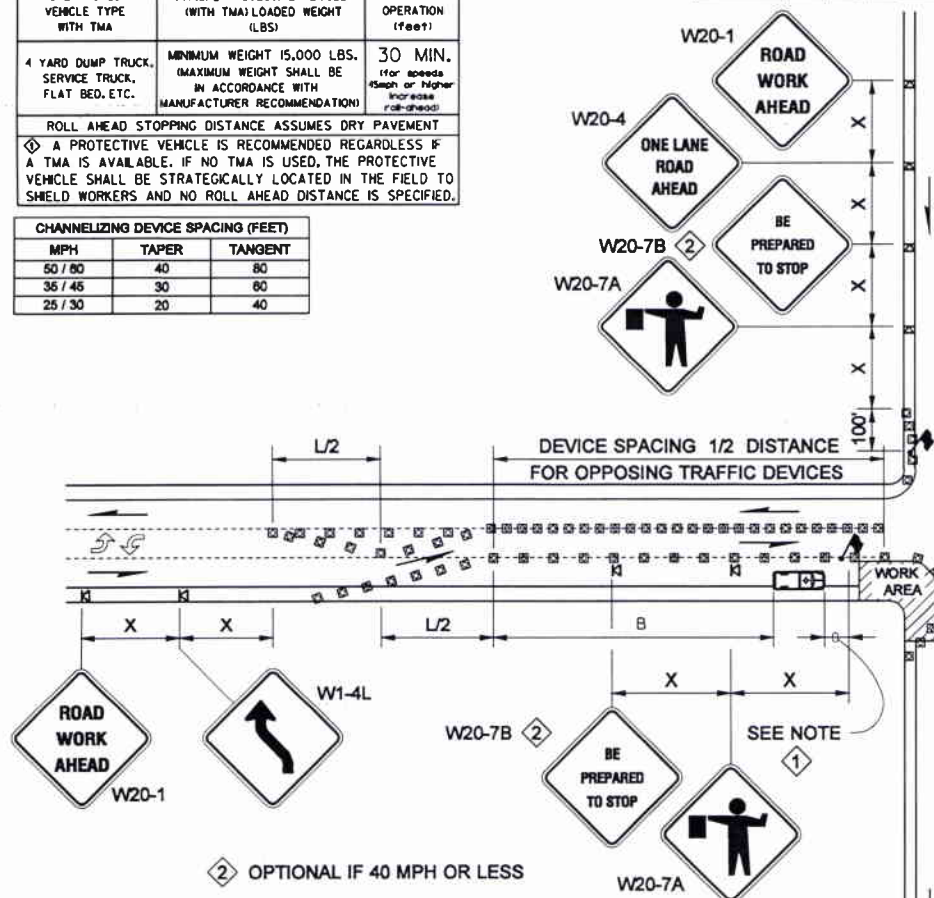
BUFFER DATA											
LONGITUDINAL BUFFER SPACE = B											
SPEED (MPH)	25	30	35	40	45	50	55	60	65	70	
LENGTH (feet)	155	200	250	305	360	425	495	570	645	730	
PROTECTIVE VEHICLE WITH TMA ROLL AHEAD DISTANCE											
TYPICAL PROTECTIVE VEHICLE TYPE WITH TMA	TYPICAL PROTECTIVE VEHICLE (WITH TMA) LOADED WEIGHT (LBS)							STATIONARY OPERATION (feet)			
4 YARD DUMP TRUCK, SERVICE TRUCK, FLAT BED, ETC.	MINIMUM WEIGHT 15,000 LBS. (MAXIMUM WEIGHT SHALL BE IN ACCORDANCE WITH MANUFACTURER RECOMMENDATION)							30 MIN. <small>(for speeds 45mph or higher increase roll-ahead)</small>			
ROLL AHEAD STOPPING DISTANCE ASSUMES DRY PAVEMENT											
◇ A PROTECTIVE VEHICLE IS RECOMMENDED REGARDLESS IF A TMA IS AVAILABLE. IF NO TMA IS USED, THE PROTECTIVE VEHICLE SHALL BE STRATEGICALLY LOCATED IN THE FIELD TO SHIELD WORKERS AND NO ROLL AHEAD DISTANCE IS SPECIFIED.											

CHANNELIZING DEVICE SPACING (FEET)		
MPH	TAPER	TANGENT
50 / 80	40	80
35 / 45	30	60
25 / 30	20	40

MINIMUM TAPER LENGTH = L (feet)											
Lane Width (feet)	Posted Speed (mph)										
	25	30	35	40	45	50	55	60	65	70	
10	105	150	205	270	450	500	550	-	-	-	
11	115	165	225	295	495	550	605	660	-	-	
12	125	180	245	320	540	600	660	720	-	-	

SIGN SPACING = X (FEET) (1)		
RURAL HIGHWAYS	60 / 65 MPH	800±
RURAL ROADS	45 / 55 MPH	500±
RURAL ROADS & URBAN ARTERIALS	35 / 40 MPH	350±
RURAL ROADS, URBAN ARTERIALS RESIDENTIAL & BUSINESS DISTRICTS	25 / 30 MPH	200± (2)
URBAN STREETS	25 MPH OR LESS	100± (2)
ALL SIGNS ARE 48" x 48" BLACK ON ORANGE UNLESS OTHERWISE DESIGNATED.		

- (1) All spacing may be adjusted to accommodate interchange ramps, at-grade intersections, and driveways.
- (2) This spacing may be reduced in urban areas to fit roadway conditions.



#### NOTES

1. Protective vehicle recommended - may be a work vehicle.
2. Recommend extending device taper (L/3) across shoulder.
3. If existing signal is present, signal shall be set to "red flash mode" or turn off during flagging operations.
4. Law enforcement officer may be used in lieu of flaggers to control intersection traffic.
5. For speed limit of 30 mph or less use sign W1-3 in lieu of sign W1-4.
6. Maintain a minimum of one access point for each business within work area limits.
7. Consider using PCMS for additional advance warning.

#### LEGEND

- FLAGGING STATION
- SIGN LOCATION
- CHANNELIZING DEVICES
- PROTECTIVE VEHICLE - RECOMMENDED
- WARNING BEACON - REQUIRED